

DIGITAL DEMODULATION AND APPLICATIONS THEREOF**ABSTRACT OF THE DISCLOSURE**

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A digital demodulator that may be utilized in integrated radio receivers and/or integrated radios includes a mixing section, 1st and 2nd digital comb filters, phase locked loop module, and a data recovery module. The mixing section is operably coupled to produce a digital I signal and a digital Q signal from a digital intermediate frequency signal. The 1st comb filter filters the digital I signal while the 2nd comb filter filters the digital Q signal. The phase locked loop module produces a digital signal from the filtered I and filtered Q signals. The data recovery module interprets the digital signal to recapture a data stream.

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